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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
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09/265,669 03/10/99 MAKITA

K 251002009000

MORRISON & FOERSTER
2000 PENNSYLVANIA AVENUE N.W.
WASHINGTON DC 20006-1888

IM62/1207

EXAMINER

SHEEHAN, J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1742

DATE MAILED:

12/07/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/265,669

Applicant(s)
Makita et al.

Examiner
John P. Sheehan

Group Art Unit
1742



☒ Responsive to communication(s) filed on Sep 28, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire Three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-43 is/are pending in the application.

Of the above, claim(s) 5-11, 17, 24, and 31-43 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-4, 12-16, 18-23, and 25-30 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of Group I, Claims 1 to 4, 12 to 16, 18 to 23 and 25 to 30, in Paper No. 8 is acknowledged. The traversal is on the ground(s) that there is no search burden on the Examiner if Groups I and II are examined together and that the Examiner has not presented any evidence to support the statement that the invention of Groups I and II "are distinct in that they are capable of separate manufacture , use or sale as claimed". This is not found persuasive because applicants have not controverted the Examiner's position that the Group I and Group II inventions are distinct. Further, there is no requirement that the Examiner must present evidence to support the statement that the invention of Groups I and II "are distinct in that they are capable of separate manufacture , use or sale as claimed". In view of the fact that the Group I and Group II inventions are distinct there would be additional burden on the Examiner if these two groups of claims were examined together, in that the Examiner would be required to search two different inventions, formulate rejections under 112, 102 and 103 for two different inventions, etc.

The requirement is still deemed proper and is therefore made FINAL.

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Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 to 4, 12 to 16, 18 to 23 and 25 to 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. The claims are indefinite in the use of the term, "matched" (claim 1, line 3; claim 3, line 3; claim 12, line 11; claim 18, line 10; and claim 25, line 11) and "matching" (claim 16, line 6; claim 23, line 5 and claim 30, line 7). These terms are used throughout the claims. However, the meaning of each of these terms in the context of the claims is not clear. For example, what does it

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mean that “the ferromagnetic phase is *matched* with the grain boundary phase” (claim 1, lines 2 and 3, emphasis added by the Examiner)? What does “said magnetic phase *matching* with said grain boundary phase” (claim 16, lines 5 and 6) mean?

II. Claim 2 is indefinite in that what the meaning if of the phrase, “atoms are arrayed *regularly* on both sides of an interface” (claim 2, lines 1 to 3). What are the metes and bounds of the term, “regularly” in this context?

III. Claim 3 is indefinite in view of the use of the word “type” (line 2), MPEP 2173.05(b) (under heading, (e) Type).

IV. Claims 12 and 16, are indefinite in view of the use of the term, “system” (see claim 12, line 4 and claim 16, line 9). The Examiner considers the term, “system” to be akin to the term “type” and therefore indefinite, MPEP 2173.05(b) (under heading, (e) Type).

V. In claim 14, lines 5 to 15; claim 21, lines 4 to 17 and claim 28, lines 4 to 14 it is not clear what applicants are attempting to claim. The Miller indices recited in these lines appear to be in Markush group format. However, applicants have not employed acceptable Markush group language, such as for example, -- at least one selected from the group consisting of--. In view of the use of the phrase, “*at least* a set of expressions” (claims 14, 21 and 28, lines 4 and 5, emphasis added by the Examiner) it is not clear whether the claims are necessarily limited to the subsequently recited expressions. What is the meaning of the parallel symbol, “//” in the context of these line? Further, in general it is not clear what applicants are attempting to claim in these lines.

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VI. In claim 16, line 1, the term "R-Tm-B" is not defined.

VII. In claim 16, the penultimate line and claim 30, the last line, the meaning of the term, "interposing" is not clear in the context of the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 to 4, 12 to 16, 18 to 23 and 25 to 30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of **Ueda et al.**

(US Patent No. 5,183,630, hereinafter referred to as Ueda), **Takeshita et al.** (US Patent

No. 5,147,447, hereinafter referred to as Takeshita), **Yamamoto et al.**'546 (US Patent

No.4,826,546, hereinafter referred to as Yamamoto '546) or **Yamamoto et al.** '875 (US Patent

No. 4,601,875, hereinafter referred to as Yamamoto '875).

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Each of the references teaches specific examples of sintered rare earth containing permanent magnets having compositions which are encompassed by the instant claims. These specific example magnets are made by a process which is the same as applicants' disclosed process, that is, these magnets are made by sintering and cooling at a cooling rate encompassed by applicants' disclosed cooling rate of 10 to 200°C/min. (Ueda, columns 35 and 36, Table 7 Examples 63 to 66 and columns 43 to 46, Table 12, Examples 93 to 96; Takeshita, column 5, lines 50 to 65; column 6, lines 48 to 68; column 7, lines 38 to 55; column 8, line 58 to column 97, line 10; column 9, line 53 to column 10, line 2 and column 11, line 45 to column 12, line 5; Yamamoto '546, column 14, Example 2; and Yamamoto '875, column 13, Example 2 and column 14, Example 5).

The claims and the references differ in that the references do not describe the crystal structure in the same terms as recited in the claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositions of the specific examples taught by the references are encompassed by the instant claims and are made by the same process as applicants claimed magnets therefore one of ordinary skill in the art would expect that the products taught by the references would be the same as applicant's claimed product.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound

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basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP2112.01.

Conclusion

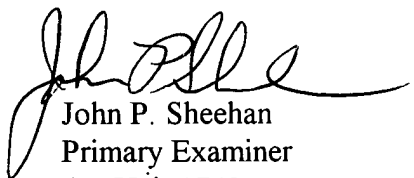
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner John P. Sheehan, whose telephone number is (703)-308-3861. The examiner can normally be reached on Tuesday-Friday from 6:30 A.M.-4:00 P.M.

The fax phone number for this Technology Center is (703)-305-3599.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

When filing a FAX in Technology Center, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

jps
December 4, 2000


John P. Sheehan
Primary Examiner
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